A COMPARATIVE STUDY OF DISEASE INCIDENCE IN ADMISSIONS TO A BASE PSYCHIATRIC HOSPITAL IN THE MIDDLE EAST.

By M. SIMS, Capt. R.A.M.C.

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In a previous investigation* it was found that the incidence of schizophrenia in a group of 627 British N.C.Os. was much lower than in the average O.R. admissions to hospital. Two questions at once arose: Why was the incidence of schizophrenia low? and How does the disease incidence of British N.C.O. psychiatric casualties compare with other groups admitted to this Base Psychiatric Hospital? The answer to the first may become apparent when we have found the answer to the second.

In this hospital we were fortunate in having a reasonable number of groups for comparison, as all the Allied and Dominion Armies, Navies and Air Forces, operating or resident in the Middle East, sent the bulk of their psychiatric casualties to us, and there was also a section for Prisoners of War (officers and other ranks). A table has been drawn up (Table I) giving the incidence of the diseases in the various groups. Diseases listed were: Anxiety states, hysterias, manic-depressive psychosis, schizophrenia, psychopathic personalities, mental deficiency and epilepsy. Although the group of psychopathic personalities accounted for about 10 per cent. of the total, they were far too diffuse a group for comparison. For example, emotional abnormality in the African native was a very different condition to that in the B.O.R. Again, the diagnosis of mental deficiency in all its grades was based on different standards, and except for English-speaking personnel, was too unreliable for comparison; in fact in the native groups-Mauritians, Africans and Arabs-a different standard was set for each race, and the question the psychiatrist had to answer was, "Is this man a mentally defective Basuto pioneer?" and not "Is this man a mental defective?" Epileptics were not admitted as such to this hospital, and those listed were cases which filtered through and therefore not a representative sample. These groups were omitted from the final table and there remained the four large groups—anxiety states, hysterias, depressions and schizophrenias—which accounted for the largest number of admissions.

In Table II the incidence of the disease has been expressed as a percentage for each group, and it can be readily seen that there is a wide divergence in incidence. For example, in some groups the percentage of anxiety state is high, while in others it is very low indeed. In twelve out of seventeen groups (and incidentally accounting for 92.5 per cent. of the total cases), when the anxiety percentage is greater than that of hysteria, then that of depression is greater than that of schizophrenia. This is a relationship which warrants

[•] Unpublished paper, "The N.C.O. as a Psychiatric Casualty."

Summary.
Percentages.
Totals and
I.—Diseases.
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ŀ	· TABLE	le I.—D	I.—Diseases.	Totals and	Totals and Percentages.	. Summary			
		Anxiety.	Hysteria.	Depression.	Schizophrenia.	M.D. and D.B.	Temp. ins. and nsw. pers.	Epilepsy.	Total.
British officers	•	. 92	. 32	. 68	12 (7.P.)	1	0	.	245
Allied whites	•	37.55	13.06	27.76	4.90 8 (1. D)		16.33	0.4	100.00
· · · · · · · · · · · · · · · · · · ·	•	62.51	62.51	\$0.12	42.11		5.26	!	100.001
New Zealand E.F		I .			1	!]	!	61
R.A.F.		90.00 •	30.00		2 (I.P.)	1	~	ı	100.00
		30.00	10.00	35.00	10.00	•	15.00		100.00
R.N. · · ·		II .		6	. 3 (I P.)	1		1	56
Australian		42.31	3.92	34.62	II.54 r (r P)	1	2.68	1	00.001
	•	00.05	•	•		•			100.001
U.D.F		. 4	1	٣	2 (I P.)	1	4	1	6
;		44.45	•	33.33	22.22				100.00
India	•	ۍ	× ·		5 (I P.)	!		61	34
,		14.71	23.53	20.59	14.70		20.29	2.88	100.00
F.O.M.	•	15:30	7.60	28.46	. 5 (1 F.) .			1	13
Other ranks:		60 07	3	30 40	30.40				00.007
B.O.Rs., N.C.Os.		. 260	. 148	. 79	27 (11 P.)	1	55	4	573
		45.38	25.83	13.79	4.70		09.6	. 70	100.00
B.O.Rs		. 974	. 688	. 231	. 164 (30)	P. 229	293	27	2,606
	•	37.38	26.40	8.86	6.59	(s. 93)	11.24	1.04	100.00
BAFORs		7.0	43	00	(6 (12 D)	62.9	č		900
		16.37	23.45	94.41		. 99.6	. 46.71		220
R.A.F. N.C.Os.	•	34.	ct Cr	01		3, 1	43.04	‡	20-001
		40.68	18.64	96.91	18.64		5.08		00.001
R.N. O.Rs		. 28	. 23	6	18 (7 P.)	61		7	93
		30.11	24.73	89.6	19.35	2.15	11.83	2.15	100.00
Africans	•	. 12	. 105	36	69	. 29	. 45	11	286
Mounitions		4.50 %	30.71	12.59	24.13	10.14	8.39	3.85	00.001
mauritans		32.43	37.84	80.9	13.51	. 92.9	4.0	. 89	100.00
Allied Europeans		or .	. 28	. 24	118	32	. 9	4	222
		4.50	12.61	10.81	53.15	14.42	2.70	1.80	66.66
Colonial Palestinian (J.) .	•	. 23	. 40	. 18	15	30	4		133
•		17.29	30.08	13,53	11.28	22.56	3.00	2.26	100.00
,, (A.)		۲۰ ۶	. 23	× ;	7	. 12		1	57
Cymriots		<u>.</u>	40.35	8 8	8 8	21.00	8.77	1	100.00
· · · · · · · · · · · · · · · · · · · ·			25.00	22.22	. 22.22	10.45	. 11.11	· !	100.00
Italian Ps.O.W.	•			. 35		121	. 67	ı	185
		3.78	10.81	18.93	41.62	6.49	15.68		100.00
			μ,	paranoid s	tates.		,		
			I						

1 ABLE 11.—Summary by Groups of Fairents Diagnosea in the Four Diseases, Anxiety, Hysteria, Depression and Schizophrenia, with Percentages.	71111	, 9,	5	d'n	ant a	ranenis Diagnosea in the rour Dis and Schizophrenia, with Percentages.	Uragn. Sphren	osea ia, u	in ine rith Pe	ros	ir Dası ntages.	zases, A	nxn	ity, HJ	ysterra,	Det	ression
				,	Anxiety.	ety.		Hysteria.	пi		Depression.	sion.		Schizophrenia.	renia.		
0 C 08				(Ž	Number.	%	Number.	} #	€	′~•	Number.	%	ĹΖ	Number	%		Totals.
British Army					260	50.58	. 148		28.80	•	79	15.37	•	27	5.25	•.	514
•		•	•	•	47	42.03	- ·		19.04		01	3,		11	19.64	•	&
Total Other Ranks	•				284	49.83	. 159		27.90		89	19.51	•	38	29.9	•	570
British Army					974	47.35	. 688		33.45		231	11.23		791	7.07		730 6
R.A.F.					37	20.00	. 53		28.65		39	21.08		56	30.27		185
R.N.					38	35.90	. 23		29.49	•	6	11.53		18	23.08	•	78
Total				۱ <u>ټ</u>	1,039	44.78	764		32.03		270	12.03		238	10.26		1330
Europeans.				•	à		•					5					2,04
Allied					10	5.56	. 28		15.56	•	24	13.33	•	811	65.55	٠	180
Falestinian (J.)			•		23	23.66	. 40		41.67		81	18.75		15	18.62		96
Cimmings (A.)				٠,	8	2.00	. 32		57.50		∞	20.00	•	7	17.00	٠	40
P. O. W.				·	۱ ٥	1			30.00	•	× ;	32.00	•	∞	32.00	•	25
					_	2.04	. 50		14.39		35	15.18		77	22. 38	•	139
Total					42	8.76	. 120		25.00	•	93	19.37		225	46.87	•	1 8€
A)rican. A. natives					12	17.5	. 101		47.20		92	16.92		9	80.16		,,,,
Mauritians					48	36.09		-	42.11	•	6	6.77		50	15.03		133
Total					1		1 9					;					1
Officers.					9	06.01	. 101		45.35		42	12.08	•	89	25.07	•	355
British Army					92	45.10	. 32		15.69	•	89	33.33	•	12	5.88	•	204
K.A.F.					9	35.30			94.11	•	7	41.18	•	¢1	92.11		17
K.N.						45.83		_	4.17	•	6	37.50		3	12.50		34
Total					100	44.50	٠ :		14.20		84	34.20		1	6.00		376
Dominion.					١	•	5		-		+	î		:	• •	•	<u>}</u>
N.Z.					-	20.00			20.00	•	•	ļ	•	•	1	•	2
Australian					1	20.00]			•	1	٠	-	50.00	•	61
					4	44.42		l			٣	33.33		61	22.22	-	6
manan .					v.	20.00	~ '	-	32.00		7	28.00	•	\$	20.00		2.5
Total					. ::	28.95		4	23.68		o <u>i</u>	26.32		∞	21.05	•	82
European.						,			,			,)
Auned wnites Ps.O.W.	· 				ლ ი	16.67		 m -	29.91		4 4	22.22	•	∞ v	44.44	•	81
						5				•	,	2		٠	30 40	•	?
Total			•		٠ ٠	16.13		_	12.90		6	29.03	• .	13	41.64	•	31

further investigation, and while coincidence can play some part, it is hardly to be expected that it is responsible for the fairly general application of the above-mentioned findings. It is true that they depend entirely on diagnosis, and diagnosis in psychiatry has always been and still is a sore point, yet the labels were not given hurriedly, but after observation and treatment. Furthermore, the A.F.B. 183 (modified M.E.) gave a useful account by the C.O. of the man's general behaviour and response to training, and to this was added a note by his M.O. and a psychiatric report from the Area Psychiatrist. The man's conduct sheet also accompanied him and much of the information usually obtained by psychiatric social workers was thus to hand, and the whole considered by more than one psychiatrist (in most cases three) before a diagnosis was finally made. In spite of all this, the element of doubt was present in some cases, but that does not prejudice the value of the figures in the tables unduly.

In biological estimations, clear-cut entities are the exception rather than the rule, and with psychiatric cases, too, there will always be a large number that are mixed on their symptomatology. Particularly is this so in war-time, as was stressed by McDougall in the last war and widely confirmed in this. Of the four diseases under review, the distinction between anxiety states with depressive features and depressions is not always clear, and as Major Torrie has pointed out (Lancet, Feb. 19, 1944), the establishment of the diagnosis was often deferred until the response to convulsant therapy could be estimated, and even then the diagnosis was often a quantitative one. Hysterias were often confused with manneristic and katatonic schizophrenias, especially in non-British personnel, and here, too, the response to convulsant therapy often determined the diagnosis. The impression was gained that each of these pairs of diseases developed in a particular personality, and while this has found support as regards anxiety states and depressions (the "super-ego diseases"), it is not generally held with the other two, yet the overlap in the cases under review often did occur.

In view of the relationship of these conditions in the tables and the clinical impression gained, the percentage of anxiety was added to that of depression, and the total expressed as a fraction over the sum of the percentages of hysteria and schizophrenia for each group, i.e. percentage A and percentage D percentage H and percentage S table (Table III) has been drawn up with this information, and it can be readily seen that there is a wide variation in the size of the fraction. It is much bigger in the British officer group, and gets smaller as we approach the non-European personnel. The lower the incidence of hysteria and schizophrenia the bigger the fraction, and it is interesting to speculate as to why there should be this variation of disease incidence in the various groups. It cannot be explained on racial grounds, for there are wide differences between the British groups, and the intelligence factor does not solve the problem either, for the R.A.F. O.Rs. show an incidence of mental deficiency of 2.66 per cent. compared with 8.79 per cent. in Army O.Rs., and yet the latter are placed higher in the list. Nevertheless, the influence of both race and intelligence has probably some bearing on the size of the fraction.

TABLE III.—Percentages of Incidence of Diseases showing in Decimals the Relationship of Grouped Figures for $\frac{A+D}{H+S}$.

Group.	Total cases.		Anxiety.		Hysteria.	D	epression.	Scl	hizophrenia.	Index.
British Army, Navy and							-			
Air Force officers	. 245		44.50		14.29		34.29		6.92	3.71
British Army N.C.Os.	. 514		50.59		28·80		15:37		5.25	1.94
	. 56		42.85		19.65		17.86		19.64	1.55
British Army, O.Rs.	. 2,057		47:35		33.45		11.23		7.97	1.41
Dominion officers .	. 38		28.95		23.68		26.32		21.05	1.24
European officers .	. 18		16.13		12.90		29.03		41.95	0.82
Mauritians	. 133		36.09		42.11		6.77		14.03	0.75
	. 78		35.90		29.49		11.53		32.08	0.75
(3)	. 96		23.96		41.67		18.75		15.62	0.75
R.A.F. O.Rs.	. 185		20.00		28.65		21.08		30.27	0.70
	. 25				26.00		32.00		32.00	0.47
	. 139		5.04		14.39		25.18		55:39	0.43
Palestinian (Arabs) .	. 40		5.00		57:50		20.00		17.00	0.34
	. 222		5.41		47.29		16.22		31.08	0.28
Allied Europeans .	. 180	•	5.56	•	15.56		13.33		65.55	0.23

These were not admitted unless they had a psychotic diagnosis. Those who were neurotic were borderline cases.

There is one essential difference between the various groups which could account for the "scatter" in the incidence of disease, and that is the degree of selection. The British officer is selected with care, and the hysteric and potential schizophrenia is largely eliminated. Similarly the trial and error principle in use with Army N.C.Os. gives a reasonably low incidence of these diseases, although the degree of selection is not quite so high. The R.A.F. O.R., on the other hand, is used largely as a tradesman, and is selected mainly for his trade qualifications, and is not expected to show the same standard of military quality as the soldier. His first severe psychiatric traumata arrive when the complex business of overseas service with its inconveniences begin to assert themselves. The soldier, on the other hand, undergoes initially a more rigorous training, with earlier breakdown in the unstable. Also the wider use of Area Psychiatrist and Selection Boards has eliminated a large number of probable hysterical breakdowns and potential schizophrenics, or at least has prevented them from coming overseas, thus lowering the incidence of these diseases in troops in the Middle East.

The low factor groups show ample evidence of inadequate selection, and in some the complete absence of it. Allied Europeans were recruited from populations which were largely refugee. Proper selection was out of the question and physical fitness alone was all that was required, and even then the standards were often allowed to fall to an inadequate level. Others were recruited from the European colonies in the cities of the Middle East, and many of the shiftless and unstable sought a solution for their failure in civilian life by volunteering for service in the armed forces of their parent country. In the case of the African native recruiting was done by the heads of the villages, and one cannot help thinking that many a village undesirable was got rid of by a cunning and unscrupulous chief. (This suspicion was later confirmed by visiting welfare

officers who knew some of the patients as civilians.) The factors involved are too numerous and complicated to allow of any criticism of selection, and it is not the purpose of this paper to make any. For example, the incidence of hysteria among African natives is comparatively high, but when one considers that the best recruits were drafted into combatant units, which have acquitted themselves well in the Far Eastern theatre, and that only pioneer units were stationed in the Middle East, we are judging a sample of the material selected—and that an admittedly inferior sample. The relatively low fraction opposite the R.N. rating may be due to the continued battle stress to which these men are subjected compared with the spasmodic stress of their comrades in the Army.

There is another point which must be stressed. While in general there is a racial gradation in the figures obtained, these do not represent the incidence of mental diseases in these peoples as a whole, but merely among those selected for the fighting forces in the theatre of war served by this Base Psychiatric Hospital. For instance, there are very large numbers of African natives who do not develop hysteria, although subject to more strain than many admitted to hospital. The figures in the table merely indicate that among the psychiatric disabilities to which the African soldier in the Middle East is prone, hysteria is very common and anxiety is very rare.

Ps.O.W. are a special group, in that they were not admitted to hospital unless they had a psychotic diagnosis, and while this principle was aimed at, a few neurotics did filter through. This group, then, is less complete than the others, and the external factors, of course, are also different, but the high incidence of schizophrenia compared with that of depression is interesting.

Selection so far has been dealt with largely from the negative point of view that is, the exclusion of the "H" and "S" cases—but this is only one side of the picture. If investigations are being confined to the four big disease groups, it follows that if the total percentage of schizophrenia and hysteria is low, then the sum of the remainder must be relatively high. This is an ordinary arithmetical relationship, but the difference in incidence has a clinical basis too. It can be said that officers rarely break down from schizophrenia and hysteria, probably because of careful selection, but it can also be stated that they are prone to anxiety states and depressions. It has been suggested that the relatively high incidence of hysteria and schizophrenia might be reduced by careful selection; can the high incidence of anxiety and depression be taken as evidence of good selection? Hardly, for with the best selection there should be no psychiatric casualties. Yet these people possess qualities which are very desirable in an officer -- a high sense of duty and the capacity to give of their best—and as Eliot Slater has pointed out (J. Neurol. Psych., 1943, 6, 1), breakdown in these people in many cases could not have been predicted and the prognosis was reasonably good. The type of personality which is favoured is one with well-marked super-ego qualities, and it would appear that good selection will inevitably include a large proportion of these people.

It has been stated above that with the best selection there would be no psychiatric casualties, but this is really a theoretical "best," for it would be impossible to gauge the breaking-point of many, and while they might not

						TABLE IV	IV.								
Group.		Anxiety		Hysteria.	_	Depression.	Schi	Schizophrenia.		Psych. pers.		Ment. def.	Miscellaneous.	•	Total.
British O.Rs. (D.).	•	273		•	•	20		23		19		52	o I		503
	•	146		20		. 09		127		80	•	58	14		555
" Army N.C.Os. (D.)		88		13				4		10	•	•	4		129
" (T.)		53		13		. 41	_	15		13	•	4	'n		120
" Officers (D.)		37		4		7		4		-	•	1			58
(T.)		32		I				œ		81		1.	61		53
" Africans (D.)		_		6		· •		21.		7	•	6	4		55
		11		32		. 81		54		19		25	80		191
Palestinian Jews (D.)	•	17		6		. 9		ı		20	•	1	1		48
" (T.)		9		+		61		S		∞.		က	1		87
" Arabs (D.)		í		17		İ		61		34	•	14			74
. (T.)	•	=		11		1		7		19	•	9	4		43
Cypriots (D.)		٣		7				4		ĸ		4			27
(T.)	٠,	က		9				4		4		=	1		8 1
Mauritians (D.)		l		4				I		61	•	I	1		9
. (T.)		l		9		61		3		61	•	1			15
Singalese (D.)		ς.		10				33		H	•	ч	н .		23
. (T.)		1		œ				7		6	•	i	1		24
Maltese (D.)		. 81		7				ı		3	•	81	1		6
., (T.)		-		1				ı		-	•	1	1		
Sudan Defence Force (D.)	•	1		1		1		i		ı		1	1		1
" " (T.)		l		١		1		-		H		ı	1		7
Royal Navy O.Rs. (D.) .		∞		ı		9		5		2	•	1	61		77
" (T.)	•	14		9		7		81		10	•	H	5		19
" " N.C.Os. (D.)	•	'n		+				ı		1	•	1			∞
" (T.)	•	7		-	•		_	61		İ		l	i		II
" " Officers (D.)	•	1		ı		; 		1		!	•	1	1		1
:	•	∞	٠.	1		3		i		!		1			12
U.D.F. European .	•	937		245		34		. 86		32		22	* ************************************		,254
" Cape Corps	•	96		19				29		H		4	9		186
", Native		‡		45		. 41		52		4	٠	11	27		155
Greek Forces		32		51		. 22		49		7	٠	01	91	•	192
				(D.) d	irec	(D.) direct admissions; (T.) transfers.	su:	(T.) tran	sfers					•	

•	Index.		. 1.757		3.71		. 4.05		209		. 1.36		. 0.031		33		0.15		. 0.21		1.5		I		. 1.07		. 3.50		1		. 0.59	,	. 3.43		1.21	1	0.29
	Total.	783	%00.00I	212	%66.66	101	%66.66	150	%66.66	45	%86.66	33	%66.66	5 8	%86.66	15	%66.66	34	%66.66	s	%00.00I		%00.00I	9	%66.66	18	%66.66	II	%66.66	159	%00.00I	1,254	%00.00I	186	%66.66	155	%00.00I
	Schizophrenia.	150	. %22.61	. 61	8.96%	12	. %88.11	75	. %00.08		13.33%	4		∞	28.57%		. %00.02	. 01	29.41%		- !	· •	. %00.001	23	38.33%	67	. %11.11			. 64	. %18.02	38	3.03%	23	12.36%	52	20.39%
	Depression.		. %12.01	. 92	. %92.21	. 91	15.84%		. %99.41	•	. %24.41	1	1		3.57%		13.33%		2.94%		i	ı			. %00.51	cı	. %11.11	m	27.27%	. 27	%00.41	34	2.71%	•	3.22%	14	7.10%
TABLE	Hysteria.	134	. %11.41	. 50		₹	3.66%	. 14	27.33%	13	28.38%	. 78	84.84%	13	46.42%		. %99.99	. 81	52.94%		40.00%	1	1	9	. %00.01	. ~	. %11.11				32.07%	245	19.54%	. 19	32.80%	45	22.84%
	Anxiety.	419	53.51%	141	. %15.99	. 69	. %18.89		8.00%	. 81	. %00.04		3.03%		21.42%			٠.	. 4.70%	٠ ٣	. %00.09				36.66%	12 .	. %99.99	∞	72.72%	32	. %21.02	937	74.72%	96	. %19.15	. 44	22.33%
						•				•				•		•		•																•			
		British O.Rs.		" N.C.Os.		" Officers		" Africans .		Palestinian Jews .		" Arabs		Cypriots	·	Mauritians		Cingalese		Maltese		Sudan Defence Force		Royal Navy O.Rs		, N.C.Os.		" Officers		Royal Greek Army		U.D.F.		" Cape Corps		" Native	

become mentally ill through action, domestic trouble may precipitate the breakdown. Also, a complete absence of psychiatric casualties would mean that many suitable individuals were rejected on account of over-caution. An optimum casualty rate should be aimed at in the interests of "man-economy," but the type of breakdown appears to be just as important as the breakdown rate.

Again, it cannot be assumed that the groups with the low incidence of anxiety and depression are deficient in super-ego qualities and do not suffer from these diseases. This is shown strikingly in African native patients, who, although exhibiting gross hysterical and other dissociative behaviour when with their units, have become extremely well integrated as a group when tribal conflicts arose. They knew, almost instinctively, where their duty lay. It appears that their super-ego is attached to tribal customs and taboos, and some find it difficult to attach it to the fight against Hitlerism, or to the Atlantic Charter, especially when their contribution is mainly that of a simple labourer. For them the conflict hardly arises, the mechanism of dissociation coming quickly into play, with a conversion hysteria resulting.

All these cases were admitted between March, 1942, and July, 1943, thus taking in the active period of operations in the North African campaign. Further groups of cases were obtained from a second Base Psychiatric Hospital, which, however, did not start admitting cases till the campaign in North Africa was over and battle casualties were few. These have been presented in tables similar to the first set (Tables IV and V), except that it was thought advisable to split up each group into direct admissions and transfers from other hospitals, and the paranoid states (including paranoid schizophrenias) were treated separately from the schizophrenias and omitted from the final analysis. The period over which the cases were admitted was from July, 1943, to September, 1944, many of the British O.R. transfers coming from Psychiatric Units in India. There are some noticeable differences in incidence, e.g. the fewer cases of hysteria in B.O.Rs., but this I attribute to the relative absence of battle stress in these groups. However, the main theme holds in the majority of groups—that is, the anxiety, hysteria, depression, schizophrenia ratio—and an index has been worked out for each group.

The U.D.F. authorities, at the request of their psychiatrist, Major Alice Cox, kindly gave me copies of her carefully prepared quarterly returns. These cases were not all admissions to hospital, but a record of psychiatric consultations, many of which were, of course, admitted. The figures are, however, very interesting in that the incidence of anxiety states is very high in European personnel, and not uncommon in the coloured groups. This is probably because the cases concerned were psychiatric consultations and not admissions to hospital, the anxiety states being more amenable to out-patient treatment. It does show, however, that African natives are liable to suffer from anxiety states, although they may not all find their way into hospital.

I am also grateful to Capt. Phillipopolus, of the Royal Greek Army, who kindly gave me his figures for psychiatric casualties in the Royal Greek Navy, Army and Air Force from October, 1943, to September, 1944, including a few out-patients examined by medical boards.

CONCLUSIONS.

In a paper of this nature it is wiser to avoid drawing conclusions, for there is much that is speculative, and the "concrete" part of the paper rests entirely on diagnosis, and that is not a very constant factor. But the difference in the incidence of diseases in the various groups is too wide to be explained away by errors in diagnosis, and there must be some other factor or factors causing them. I have suggested that it is largely due to the degree and standard of selection and the psychiatric screening, although allowances may be made for undue stress in the case of the Royal Navy. When these standards have been high, the anxiety states and the depressions predominate, and when low the hysterias and schizophrenias predominate. The $\frac{A \text{ and } D}{H \text{ and } S}$ fraction may be

used as a psychiatric index of selection, but how fine it is and how much importance can be attached to it is difficult to say. More comparative tables with larger numbers would be necessary before any real reliance could be placed on it.

Although there is an arithmetical relationship between hysteria and schizophrenia, there is not sufficient evidence in this investigation to show that there is any definite clinical relationship between the two, but it does leave the matter open for discussion, and the parallel between the hysteria and schizophrenia group and that of anxiety and depression is a tempting one to draw.

Explanatory notes on each group have not been given, it being thought advisable to present the comparative tables as a general picture and avoid particularization, although each group has its own quota of qualifying factors.

In general, then, it would appear that to discuss disease incidence among patients in a military psychiatric hospital without splitting them up into their respective groups might prove misleading.

SUMMARY.

A comparative study of disease incidence in patients admitted to military psychiatric hospitals has been made. The influence of the degree of selection and psychiatric screening on the various groups has been discussed.

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